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RAW SEQUENCE LISTING   DATE: 04/07/2003
PATENT APPLICATION: **US/10/060,369**   TIME: 14:31:24

Input Set : **A:\2931-104.txt**
Output Set: **N:\CRF4\04072003\J060369.raw**

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   3 <110> APPLICANT: Zastawny, Roman
   5 <120> TITLE OF INVENTION: G PROTEIN COUPLED RECEPTOR A4
   7 <130> FILE REFERENCE: 2931-104
   9 <140> CURRENT APPLICATION NUMBER: US 10/060369
C--> 10 <141> CURRENT FILING DATE: 2003-03-31
  12 <150> PRIOR APPLICATION NUMBER: US 09/173565
  13 <151> PRIOR FILING DATE: 1998-08-16
  15 <160> NUMBER OF SEQ ID NOS: 12
  17 <170> SOFTWARE: PatentIn version 3.2
  19 <210> SEQ ID NO: 1
  20 <211> LENGTH: 28
  21 <212> TYPE: DNA
  22 <213> ORGANISM: Artificial Sequence
  24 <220> FEATURE:
  25 <223> OTHER INFORMATION: PCR primer
  27 <400> SEQUENCE: 1
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  32 <211> LENGTH: 28
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  34 <213> ORGANISM: Artificial Sequence
  36 <220> FEATURE:
  37 <223> OTHER INFORMATION: PCR primer
  39 <400> SEQUENCE: 2
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  44 <211> LENGTH: 26
  45 <212> TYPE: DNA
  46 <213> ORGANISM: Artificial Sequence
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  51 <400> SEQUENCE: 3
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  58 <213> ORGANISM: Artificial Sequence
  60 <220> FEATURE:
  61 <223> OTHER INFORMATION: PCR primer
  63 <400> SEQUENCE: 4
  64 actcactata gggctcgagc ggc                                23
  67 <210> SEQ ID NO: 5
  68 <211> LENGTH: 50
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Input Set : **A:\2931-104.txt**
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 70 <213> ORGANISM: Artificial Sequence
 72 <220> FEATURE:
 73 <223> OTHER INFORMATION: PCR primer
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 80 <211> LENGTH: 50
 81 <212> TYPE: DNA
 82 <213> ORGANISM: Artificial Sequence
 84 <220> FEATURE:
 85 <223> OTHER INFORMATION: PCR primer
 87 <400> SEQUENCE: 6
 88 aggattatca ctctagatct ttttaaatct cactgctgtt agtagtttct           50
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 92 <211> LENGTH: 27
 93 <212> TYPE: DNA
 94 <213> ORGANISM: Artificial Sequence
 96 <220> FEATURE:
 97 <223> OTHER INFORMATION: PCR primer
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104 <211> LENGTH: 1440
105 <212> TYPE: DNA
106 <213> ORGANISM: Human
108 <400> SEQUENCE: 8
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111 agacgggctt ggtggattct ggttcctgcc gccgacaggg ctcgccggga gaggttcatc   120
113 atgaatgaga aatgggacac aaactcttca gaaaactggc atcccatctg gaatgtcaat   180
115 gacacaaagc atcatctgta ctcagatatt aatattacct atgtgaacta ctatcttcac   240
117 cagcctcaag tggcagcaat cttcattatt tcctactttc tgatcttctt tttgtgcatg   300
119 atgggaaata ctgtggtttg ctttattgta atgaggaaca aacatatgca cacagtcact   360
121 aatctcttca tcttaaacct ggccataagt gatttactag ttggcatatt ctgcatgcct   420
123 ataacactgc tggacaatat tatagcagga tggccatttg gaaacacgat gtgcaagatc   480
125 agtggattgg tccagggaat atctgtcgca gcttcagtct ttacgttagt tgcaattgct   540
127 gtagataggt tccagtgtgt ggtctaccct tttaaaccaa agctcactat caagacagcg   600
129 tttgtcatta ttatgatcat ctgggtccta gccatcacca ttatgtctcc atctgcagta   660
131 atgttacatg tgcaagaaga aaaatattac cgagtgagac tcaactccca gaataaaacc   720
133 agtccagtct actggtgccg ggaagactgg ccaaatcagg aaatgaggaa gatctacacc   780
135 actgtgctgt ttgccaacat ctacctggct cccctctccc tcattgtcat catgtatgga   840
137 aggattggaa tttcactctt cagggctgca gttcctcaca caggcaggaa gaaccaggag   900
139 cagtggcacg tggtgtccag gaagaagcag aagatcatta agatgctcct gattgtggcc   960
141 ctgctttttta ttctctcatg gctgcccctg tggactctaa tgatgctctc agactacgct  1020
143 gaccttttctc caaatgaact gcagatcatc aacatctaca tctacccttt tgcacactgg  1080
145 ctggcattcg gcaacagcag tgtcaatccc atcatttatg gtttcttcaa cgagaatttc  1140
147 cgccgtggtt ccaagaagc tttccagctc cagctctgcc aaaaaagagc aaagcctatg  1200
149 gaagcttata ccctaaaagc taaaagccat gtgctcataa acacatctaa tcagcttgtc  1260
151 caggaatcta catttcaaaa ccctcatggg gaaaccttgc tttataggaa aagtgctgaa  1320
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153 aaacccccaac aggaattagt gatggaagaa ttaaaagaaa ctactaacag cagtgagatt   1380
155 taaaaagagc tagtgtgata atcctaactc tactacgcat tatatattta aatccattgc   1440
158 <210> SEQ ID NO: 9
159 <211> LENGTH: 420
160 <212> TYPE: PRT
161 <213> ORGANISM: Human
163 <400> SEQUENCE: 9
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169 Trp Asn Val Asn Asp Thr Lys His His Leu Tyr Ser Asp Ile Asn Ile
170             20                  25                  30
173 Thr Tyr Val Asn Tyr Tyr Leu His Gln Pro Gln Val Ala Ala Ile Phe
174         35                  40                  45
177 Ile Ile Ser Tyr Phe Leu Ile Phe Phe Leu Cys Met Met Gly Asn Thr
178     50                  55                  60
181 Val Val Cys Phe Ile Val Met Arg Asn Lys His Met His Thr Val Thr
182 65                  70                  75                  80
185 Asn Leu Phe Ile Leu Asn Leu Ala Ile Ser Asp Leu Leu Val Gly Ile
186             85                  90                  95
189 Phe Cys Met Pro Ile Thr Leu Leu Asp Asn Ile Ile Ala Gly Trp Pro
190             100                 105                 110
193 Phe Gly Asn Thr Met Cys Lys Ile Ser Gly Leu Val Gln Gly Ile Ser
194         115                 120                 125
197 Val Ala Ala Ser Val Phe Thr Leu Val Ala Ile Ala Val Asp Arg Phe
198     130                 135                 140
201 Gln Cys Val Val Tyr Pro Phe Lys Pro Lys Leu Thr Ile Lys Thr Ala
202 145                 150                 155                 160
205 Phe Val Ile Ile Met Ile Ile Trp Val Leu Ala Ile Thr Ile Met Ser
206             165                 170                 175
209 Pro Ser Ala Val Met Leu His Val Gln Glu Glu Lys Tyr Tyr Arg Val
210             180                 185                 190
213 Arg Leu Asn Ser Gln Asn Lys Thr Ser Pro Val Tyr Trp Cys Arg Glu
214         195                 200                 205
217 Asp Trp Pro Asn Gln Glu Met Arg Lys Ile Tyr Thr Thr Val Leu Phe
218     210                 215                 220
221 Ala Asn Ile Tyr Leu Ala Pro Leu Ser Leu Ile Val Ile Met Tyr Gly
222 225                 230                 235                 240
225 Arg Ile Gly Ile Ser Leu Phe Arg Ala Ala Val Pro His Thr Gly Arg
226             245                 250                 255
229 Lys Asn Gln Glu Gln Trp His Val Val Ser Arg Lys Lys Gln Lys Ile
230             260                 265                 270
233 Ile Lys Met Leu Leu Ile Val Ala Leu Leu Phe Ile Leu Ser Trp Leu
234         275                 280                 285
237 Pro Leu Trp Thr Leu Met Met Leu Ser Asp Tyr Ala Asp Leu Ser Pro
238     290                 295                 300
241 Asn Glu Leu Gln Ile Ile Asn Ile Tyr Ile Tyr Pro Phe Ala His Trp
242 305                 310                 315                 320
245 Leu Ala Phe Gly Asn Ser Ser Val Asn Pro Ile Ile Tyr Gly Phe Phe
246             325                 330                 335
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249 Asn Glu Asn Phe Arg Arg Gly Phe Gln Glu Ala Phe Gln Leu Gln Leu
250             340             345             350
253 Cys Gln Lys Arg Ala Lys Pro Met Glu Ala Tyr Thr Leu Lys Ala Lys
254         355             360             365
257 Ser His Val Leu Ile Asn Thr Ser Asn Gln Leu Val Gln Glu Ser Thr
258     370             375             380
261 Phe Gln Asn Pro His Gly Glu Thr Leu Leu Tyr Arg Lys Ser Ala Glu
262 385             390             395                 400
265 Lys Pro Gln Gln Glu Leu Val Met Glu Glu Leu Lys Glu Thr Thr Asn
266             405             410             415
269 Ser Ser Glu Ile
270         420
273 <210> SEQ ID NO: 10
274 <211> LENGTH: 384
275 <212> TYPE: PRT
276 <213> ORGANISM: Human
278 <400> SEQUENCE: 10
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281 1           5               10              15
284 Asn Phe Ser Glu Lys Asn Ala Gln Leu Leu Ala Phe Glu Asn Asp Asp
285         20              25              30
288 Cys His Leu Pro Leu Ala Met Ile Phe Thr Leu Ala Leu Ala Tyr Gly
289         35              40              45
292 Ala Val Ile Ile Leu Gly Val Ser Gly Asn Leu Ala Leu Ile Ile Ile
293     50              55              60
296 Ile Leu Lys Gln Lys Glu Met Arg Asn Val Thr Asn Ile Leu Ile Val
297 65              70              75              80
300 Asn Leu Ser Phe Ser Asp Leu Leu Val Ala Ile Met Cys Leu Pro Phe
301             85              90              95
304 Thr Phe Val Tyr Thr Leu Met Asp His Trp Val Phe Gly Glu Ala Met
305             100             105             110
308 Cys Lys Leu Asn Pro Phe Val Gln Cys Val Ser Ile Thr Val Ser Ile
309         115             120             125
312 Phe Ser Leu Val Leu Ile Ala Val Glu Arg His Gln Leu Ile Ile Asn
313     130             135             140
316 Pro Arg Gly Trp Arg Pro Asn Asn Arg His Ala Tyr Val Gly Ile Ala
317 145             150             155                 160
320 Val Ile Trp Val Leu Ala Val Ala Ser Ser Leu Pro Phe Leu Ile Tyr
321             165             170             175
324 Gln Val Met Thr Asp Glu Pro Phe Gln Asn Val Thr Leu Asp Ala Tyr
325             180             185             190
328 Lys Asp Lys Tyr Val Cys Phe Asp Gln Phe Pro Ser Asp Ser His Arg
329         195             200             205
332 Leu Ser Tyr Thr Thr Leu Leu Leu Val Leu Gln Tyr Phe Gly Pro Leu
333     210             215             220
336 Cys Phe Ile Phe Ile Cys Tyr Phe Lys Ile Tyr Ile Arg Leu Lys Arg
337 225             230             235                 240
340 Arg Asn Asn Met Met Asp Lys Met Arg Asp Asn Lys Tyr Arg Ser Ser
341             245             250             255
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Input Set : A:\2931-104.txt
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344 Glu Thr Lys Arg Ile Asn Ile Met Leu Leu Ser Ile Val Val Ala Phe
345         260             265             270

348 Ala Val Cys Trp Leu Pro Leu Thr Ile Phe Asn Thr Val Phe Asp Trp
349         275             280             285

352 Asn His Gln Ile Ile Ala Thr Cys Asn His Asn Leu Leu Phe Leu Leu
353     290             295             300

356 Cys His Leu Thr Ala Met Ile Ser Thr Cys Val Asn Pro Ile Phe Tyr
357 305             310             315                     320

360 Gly Phe Leu Asn Lys Asn Phe Gln Arg Asp Leu Gln Phe Phe Phe Asn
361             325             330             335

364 Phe Cys Asp Phe Arg Ser Arg Asp Asp Asp Tyr Glu Thr Ile Ala Met
365             340             345             350

368 Ser Thr Met His Thr Asp Val Ser Lys Thr Ser Leu Lys Gln Ala Ser
369         355             360             365

372 Pro Val Ala Phe Lys Lys Ile Asn Asn Asn Asp Asp Asn Glu Lys Ile
373     370             375             380

376 <210> SEQ ID NO: 11
377 <211> LENGTH: 444
378 <212> TYPE: PRT
379 <213> ORGANISM: Human
381 <400> SEQUENCE: 11

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387 Ser Ala Ser Glu Leu Asn Glu Thr Gln Glu Pro Phe Leu Asn Pro Thr
388         20              25              30

391 Asp Tyr Asp Asp Glu Glu Phe Leu Arg Tyr Leu Trp Arg Glu Tyr Leu
392         35              40              45

395 His Pro Lys Glu Tyr Glu Trp Val Leu Ile Ala Gly Tyr Ile Ile Val
396     50              55              60

399 Phe Val Val Ala Leu Ile Gly Asn Val Leu Val Cys Val Ala Val Trp
400 65              70              75              80

403 Lys Asn His His Met Arg Thr Val Thr Asn Tyr Phe Ile Val Asn Leu
404             85              90              95

407 Ser Leu Ala Asp Val Leu Val Thr Ile Thr Cys Leu Pro Ala Thr Leu
408         100             105             110

411 Val Val Asp Ile Thr Glu Thr Trp Phe Phe Gly Gln Ser Leu Cys Lys
412     115             120             125

415 Val Ile Pro Tyr Leu Gln Thr Val Ser Val Ser Val Ser Val Leu Thr
416     130             135             140

419 Leu Ser Cys Ile Ala Leu Asp Arg Trp Tyr Ala Ile Cys His Pro Leu
420 145             150             155             160

423 Met Phe Lys Ser Thr Ala Lys Arg Ala Arg Asn Ser Ile Val Ile Ile
424             165             170             175

427 Trp Ile Val Ser Cys Ile Ile Met Ile Pro Gln Ala Ile Val Met Glu
428             180             185             190

431 Cys Ser Thr Val Phe Pro Gly Leu Ala Asn Lys Thr Thr Leu Phe Thr
432         195             200             205

435 Val Cys Asp Glu Arg Trp Gly Gly Glu Ile Tyr Pro Lys Met Tyr His
436     210             215             220
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VERIFICATION SUMMARY   DATE: 04/07/2003
PATENT APPLICATION: **US/10/060,369**   TIME: 14:31:25

Input Set : **A:\2931-104.txt**
Output Set: **N:\CRF4\04072003\J060369.raw**

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date